

Claims:

1. An air cleaning device comprising a bulb-shaped casing (1) provided at one end with an attached portion to be attached to an attaching portion and at the other end with an outlet (3a), and a negative ion generator (21) accommodated in the casing, characterized in that the attached portion is connected to a commercial power source and that negative ions are generated by discharge of the negative ion generator and released from the outlet.

2. An air cleaning device comprising a bulb-shaped casing (1) provided at one end with a fed portion (4) to be attached to a feed portion and at the other end with an outlet (3a), an AC/DC converter (11) accommodated in the casing for converting an alternating current from the fed portion into a direct current, a boosting transformer (12) accommodated in the casing for boosting voltage from the AC/DC converter, and a negative ion generator (21) accommodated in the casing to face the outlet and connected to the boosting transformer, characterized in that the fed portion is connected to a commercial power source, that high voltage is applied from the boosting transformer to the negative ion generator to induce electrical discharge and generate negative ions and that the negative ions are released from the outlet.

3. The air cleaning device according to claim 1 or claim 2, characterized in that the bulb-shaped casing (1) comprises a casing body (2) having one end provided with the fed portion (4) and the other end made open and a lid (3) having one end provided with the outlet (3a) and the other end fixed or detachably attached to the open end of the casing body.

4. The air cleaning device according to claim 1 or claim 2, characterized in that the negative ion generator (21) is constituted of a needle-like electrode (23) having a distal end directed to a side of the

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outlet.

5. The air cleaning device according to claim 2, characterized in that the DC/AC converter (11) and the boosting transformer (12) are made integral.

6. The air cleaning device according to claim 1 or claim 2, characterized in that the bulb-shaped casing (1) is provided at the other end with an illuminator (32).

7. The air cleaning device according to claim 1 or claim 2, characterized in that the fed portion (4) comprises a base to be attached to and detached from a socket.

8. The air cleaning device according to claim 1 or claim 2, characterized in that the fed portion (4) comprises a base (4A, 4B) having a pair of pins projecting from a peripheral surface in opposite directions.

9. The air cleaning device according to claim 1 or claim 2, characterized in that the fed portion (4) comprises a plug having a pair of blades (4C) or pins (4D) to be attached to and detached from an electrical receptacle.

10. An air cleaning device comprising a bulb-shaped casing (1) provided at one end with an attached portion to be attached to an attaching portion and at the other end with an outlet (3a), accommodating an ozone generator (21A), and formed with a portion (2a, 3c) for supplying air into the ozone generator, characterized in that the attached portion is connected to a commercial power source, that the ozone generator induces electrical discharge to generate negative ions and ozone and that a stream of air containing the negative ions and ozone is released from the ozone generator to the outlet.

11. An air cleaning device comprising a bulb-shaped casing (1) provided at one end with a fed portion (4) to be attached to a feed portion and at the other end with an outlet (3a), an AC/DC converter (11)

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accommodated in the casing for converting an alternating current from the fed portion into a direct current, a boosting transformer (12) accommodated in the casing for boosting voltage from the fed portion, an ozone generator (21A) accommodated in the casing to face the outlet and connected to the boosting transformer, and an air supply portion (2a, 3c) formed in the casing for supplying air into the ozone generator, characterized in that the fed portion is connected to a commercial power source and that high voltage is applied from the boosting transformer to the ozone generator to induce electrical discharge, generate negative ions and ozone and produce a stream of air containing the negative ions and ozone that flows from the ozone generator toward the outlet.

12. The air cleaning device according to claim 10 or claim 11, characterized in that the bulb-shaped casing (1) comprises a casing body (2) having one end provided with the fed portion (4) and the other end made open and a lid (3) having one end provided with the outlet (3a) and the other end detachably attached to the other end of the casing body.

13. The air cleaning device according to claim 10 or claim 11, characterized in that the ozone generator (21A) comprises a needle-like first electrode (23) having a distal end directed to the outlet (3a) and a cylindrical second electrode (24) concentric with the first electrode (23) and disposed concentrically with the outlet, and that application of high voltage between the first electrode and the second electrode induces electrical discharge therebetween to generate negative ions and ozone and produce a stream of air containing the negative ions and ozone that flows from the first electrode toward the second electrode and outlet.

14. The air cleaning device according to claim 10 or claim 11, characterized in that the ozone generator (21A) comprises a needle-like first electrode (23) having a distal end directed to the outlet (3a) and a platelike second electrode (25) having a circular opening concentric with

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the first electrode (23) and disposed concentrically with the outlet, and that application of high voltage between the first electrode and the second electrode induces electrical discharge therebetween to generate negative

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ions and ozone and produce a stream of air containing the negative ions and ozone that flows from the first electrode toward the second electrode and outlet.

15. The air cleaning device according to claim 13, characterized in that the first electrode (23) is accommodated in the casing body (1) and that the second electrode (24) in the lid (3).

16. The air cleaning device according to claim 14, characterized in that the first electrode (23) is accommodated in the casing body (1) and that the second electrode (25) in the lid (3).

17. The air cleaning device according to claim 11, characterized in that the DC/AC converter (11) and the boosting transformer (12) are made integral.

18. The air cleaning device according to claim 10 or claim 11, characterized in that the casing (1) is provided at the other end with an illuminator (32).

19. The air cleaning device according to claim 10 or claim 11, characterized in that the fed portion (4) comprises a base to be attached to and detached from a socket.

20. The air cleaning device according to claim 10 or claim 11, characterized in that the fed portion (4) comprises a base (4A, 4B) having a pair of pins projecting from a peripheral surface in opposite directions.

21. The air cleaning device according to claim 10 or claim 11, characterized in that the fed portion (4) comprises a plug having a pair of blades (4C) or pins (4D) to be attached to and detached from an electrical receptacle.

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